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C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

11.4.3.a STAR Power Supply SHUT-DOWN Check Off List

C-A-OPM Procedures in which this Attachment is used.		
11.4.3		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved: _____ **Signature On File** _____
Collider-Accelerator Department Chairman Date

P. Rosas

STAR Power Supply SHUT-DOWN Check Off List

1. Set all power supplies set-points to zero:
 - Space Trim East PS. []
 - Space Trim West PS. []
 - Pole Tip Trim East (PTT-EAST) PS. []
 - Pole Tip Trim West (PTT-WEST) PS. []
 - Main Magnet PS. []

Note:

Main Magnet PS set point shall be reduced at a rate of 6 amp/ sec.
Pole Tip Trim power supplies shall be reduced at a rate of 1.6 amp/sec.

2. Verify that the AC line voltage meters are working on each Pole Tip Trim PS. []

3. Verify that the AC line voltage indicator lights are **ON** for each Space Trim PS. []

4. When the Main Magnet PS is at Zero output current then place each power supply into Stand-by:
 - Set Space Trim East PS to **Stand-by**. []
 - Set Space Trim West PS to **Stand-by**. []
 - Set Pole Tip Trim East PS to **Stand-by**. []
 - Set Pole Tip Trim West PS to **Stand-by**. []
 - Set Main Magnet PS to **Stand-by**. []

5. Notify **Pump Room Operator** that the *STAR* power supply water system will be shut down. []
 - Shut down *STAR* power supply water. []
 - Set Space Trim East PS to **OFF**. []
 - Set Space Trim West PS to **OFF**. []
 - Set Pole Tip Trim East PS to **OFF**. []
 - Set Pole Tip Trim West PS to **OFF**. []
 - Set Main Magnet PS to **OFF**. []

6. Main magnet 13.8 KV circuit breaker lock out:
 - Unlock 13.8 KV circuit breaker door with **UEB-19** key. []
 - Withdraw the 13.8 KV circuit breaker to the **TEST** position. []
 - Turn and remove Kirk lock key **1A**. []
 - Place key **1A** in the 'A' Transfer lock. []
 - Lock 13.8 KV circuit breaker door with **UEB-19** lock. []

7. Pole Tip Trim East (PTT-EAST) power supply AC fused disconnect switch lock out:
 - Place PTT-EAST AC disconnect switch (at PB-1) in the **OFF** position. []

- Turn and remove Kirk Lock key **2A**. []
 - Place key **2A** in the 'A' Transfer lock. []
 - Verify that the AC line voltage meters are de-energized on the Pole Tip Trim East power supply. []
8. Pole Tip Trim West (PTT-WEST) power supply AC fused disconnect switch lock out:
- Place PTT-West AC disconnect switch (at PB-1) in the **OFF** position. []
 - Turn and remove Kirk Lock key **3A**. []
 - Place key **3A** in the 'A' Transfer lock. []
 - Verify that the AC line voltage meters are de-energized on the Pole Tip Trim West power supply. []
9. Space Trim West power supply AC fused disconnect switch lock out:
- Place Space-Trim West AC disconnect switch (at the PS) in the **OFF** position. []
 - Place Space-Trim West AC disconnect switch (at PB-1) in the **OFF** position. []
 - Turn and remove Kirk Lock key **4A**. []
 - Place key **4A** in the 'A' Transfer lock. []
 - Verify that the AC line voltage indicator light is **de-energized** on the Space Trim West power supply. []
10. Space Trim East power supply AC fused disconnect switch lock out:
- Place Space-Trim East AC disconnect switch (at the PS) in the **OFF** position. []
 - Place Space-Trim East AC disconnect switch (at PB-1) in the **OFF** position. []
 - Turn and remove Kirk Lock key **5A**. []
 - Place key **5A** in the 'A' Transfer lock. []
 - Verify that the AC line voltage indicator light is **de-energized** on the Space Trim East power supply. []
 - Remove Kirk Lock key **7X** from the 'A' Transfer lock and place it in the 'B' Transfer lock. []
 - Insert **PS Access key 6B** in Transfer lock 'B' and release PS keys **1B, 2B, 3B, 4B** and **5B** for power supply entry. []
11. Record on the Power Supply logbook, the Shut-Down completion []

NOTES:

Completed By: _____

Date: _____